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ROZIN, Bentsian Brosovich, inzh.; GEYFMAN, Roman Samuilovich; BRYUKHANENKO, B.A., red.; BRUSHTEYN, A.I., red. izd-va; ATTOPOVICH, M.K., tekhn. red.

[Mathematical methods and computer techniques in the organization of iron and steel making processes] Matematicheskie metody i schetnaia tekhnika v organizatsii metallurgicheskogo proizvodstva. Moskva, Metallurgizdat, 1962. 126 p.
(MIRA 15:5)

(Punched card systems--Metallurgy)

ANDREYEV, Viktor Fedorovich, kand. ekon. nauk; BANNYY, Nikolay Pavlovich, dots., kand. ekon. nauk; GORELIK, Iosif Grigor'yevich, dots., kand. ekon. nauk [deceased]; KATYSHEV, Viktor Leonidovich; OBLOMSKIY, Yakov Antonovich, dots., kand. ekon. nauk; PEKELIS, Isay Borisovich; PINEGIN, Ivan Ivanovich; PRIYMAK, Ivan Andreyevich, prof., doktor tekhn. nauk [deceased]; ROYTBURD, Lazar' Nisonovich, prof., doktor ekon. nauk; ROMANOVICH, Nikolay Dmitriyevich; BORDIN, M.M., retsenzent; BRYUKHANENKO, B.A., dots., kand. ekon. nauk, retsenzent; KHUTORSKAYA, Ye.S., red.izd-va; KARASEV, A.I., tekhn. red.

[Economics of ferrous metallurgy in the U.S.S.R.] Ekonomika chernoi metallurgii SSSR. [By] V.F.Andreev i dr. Pod red. L.N.Roitburda i N.P.Bannogo. Moskva, Metallurgizdat, 1963. 384 p. (MIRA 16:5)
(Iron industry) (Steel industry)

BEL'GOL'SKIY, Boris Petrovich; MEDVEDEV, Ivan Alekseyevich;
BRYUKHANENKO, B.A., red.; KHUTORSKAYA, R.Ya., red.izd-va;
GINZBURG, R.Ya., tekhn. red.

[Economics, organization and planning of metal rolling]
Ekonomika organizatsii i planirovanie prokatnogo proizvodstva. Moskva, Metallurgizdat, 1963. 157 p.
(MIRA 16:10)

(Rolling (Metalwork))

BRYUKHANENKO, B.A., dotsent, kand. ekonom. nauk; BEN', T.G.; GERSHTENKERN, S.Ya.; KAGAN, I.S.; PRAVDIN, M.V.; STOGNIY, A.F.; KHAKHALINA, A.N.; CHERNIKHOV, V.S.; KOBYLYAKOV, I.I., dotsent, kand. ekonom. nauk; SHIRYAYEV, P.A., kand. ekonom. nauk

"Economic aspects of ferrous metallurgy" by N.P. Bannyi, V.B. Brodskii, IA.A. Oblomskii, V.V. Rikman, L.N. Roitburd. Reviewed by B.A. Briukhanenko and others. Stal' 22 no.6: 562-565 Je '62. (MIRA 16:7)

1. Dnepropetrovskiy metallurgicheskiy institut (for Ben', Gershtenkern, Kagan, Pravdin, Stogniy, Khakhalina, Chernikhov). 2. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz (for Kobylyakov).

(Iron industry) (Steel industry)
(Brodskii, V.B.) (Oblomskii, IA.A.)
(Rikman, V.V.) (Roitburd, L.N.)

BEL'GOL'SKIY, Boris Petrovich; BRYUKHANENKO, B.A., red.; KHUTORSKAYA, Ye.S., red.izd-va; KOROVINA, N.A., tekhn. red.

[How best to organize the work of a rolling mill operator] Kak luchshe organizovat' trud prokatchika. Moskva, Metallurgizdat, 1963. 71 p. (MIRA 17:3)

BRYUKHANENKO, B.A., kand.ekonom.nauk

Methods of estimating the output of rolling mills for a planned period. Stal' 23 no. 3:271-275 Mr '64. (MIRA 17:5)

1. Moskovskiy inzhenerno-ekonomicheskiy institut im.S.Ordzhonikidze.

BRYUKHANOV, A.A. [Briukhanov, A.O.]

Study of the elastic properties of steel wires in the recrystallization region. Ukr. fiz. zhur. 10 no.1:104-108 Ja '65. (MIRA 18:4)

1. Odesskiy pedagogicheskiy institut im. Ushinskogo.

L 36846-66 ~~EWP(k)/EWT(m)/T/EWP(w)/EWT(t)/ETI IJP(c) JW/JD/HW~~

ACC NR: AP6019505 SOURCE CODE: UR/0129/66/000/006/0039/0041

AUTHOR: Bryukhanov, A. A.; Baranovskaya, Z. A.; Bryukhanov, A. Ye. 53 B

ORG: Odessa State University (Odessniy gosudarstvennyy universitet)

TITLE: Rolled structure and elastic anisotropy of Kovar alloy

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 6, 1966, 39-41

TOPIC TAGS: cold rolling, crystal anisotropy, Young modulus

ABSTRACT: The starting material for the investigation was a cold rolled Kovar sheet 2 mm thick. Previous X ray study showed that in its initial state the alloy had a face centered cubic lattice, with its constant a = 3.58 Å. The density of the alloy, measured by the standard weight method, was 8.92 grams/cm^3. Samples were cut from the sheet at various angles to the direction of rolling; the Young modulus of these samples was measured. After measurement of the Young modulus in the initial state, the samples were annealed, after which the Young modulus was again measured. It was found that the degree of anisotropy depends on the annealing temperature. The index a increases up to 500°C, reaches a maximum value of 16% and, after annealing at 600°C, decreases sharply

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UDC: 620.186.4:620

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ACC NR: AP6019505

to 5.5% and does not change thereafter with higher annealing temperatures. Orig. art. has: 2 figures.

SUB CODE: 11, 20/ SUBM DATE: none.

Card 2/2

BRYUKHANOV, A.I.

Machine for polishing rectilinear and curved furniture parts.
Der. prom. 10-no.7:11-12 Jl '61. (MIRA 14:7)

1. Stavropol'skiy zavod "Krasnyy metallist".
(Woodworking machinery)

BRYUKHANOV, A. N.

REBEL'SKIY, A.V., kandidat tekhnicheskikh nauk; BRYUKHANOV, A.N., inzhener.

[Design and calculation of dies for drop forging] Konstruirovanie i raschet shtampov dlia goriachei shtampovki... Vol. 1. [Forging and trimming dies] Molotovye i obreznye shtampy. Moskva, Gos. nauch.-tekhn. izd-vo mashstroit. lit-ry, 1947-
(Dies (Metalworking))
(MLRA 7:5)

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 222 - I

BOOK

Call No.: TS225.R4

Authors: BRYUKHANOV, A. N. and REBEL'SKIY, A. V.
Full Title: HOT STAMPING. DESIGNING AND COMPUTATION OF DIES
Transliterated Title: Goryachaya stampovka. Konstruirovaniye i raschet shtampov

Publishing Data
Originating Agency: None
Publishing House: State Scientific and Technical Publishing House of Literature on Machine Building
Date: 1952
No. pp.: 666
No. of copies: 7,000

Editorial Staff
Editor: Okhrimenko, Ya. M., Cand. Eng. Sci.
Editor-in-Chief: None

Tech. Ed.: Editorial Office on Heavy-Machine-Building Literature. Office Manager Galovin, S. Ya., Eng.
Appraisers: All-Union Section of Forge and Stamping Press Operators "VNITOMASH". (All-Union Mechanical Engineers Scientific and Technical Society)

Goryachaya stampovka. Konstruirovaniye i raschet shtampov

AID 222 - I

Text Data

Coverage: The book describes various processes of hot stamping and rolling, the design of machines, rollers and dies corresponding to the sequence of operations required for different shapes of manufactured articles such as crankshafts, connecting rods, pistons, valves, levers, links and many other machine parts. Methods of design and computations are outlined for the determination of working pressure, temperature, sizes and shapes of initial material with given allowances and tolerances.

The most interesting parts of the book from the viewpoint of Soviet practice are the tables and drawings showing the sequence of operations required for stamping of various articles of simple and complicated shapes. These tables and drawings contain actual dimensions, allowances, tolerances and also description of particular operations.

Purpose: A textbook for the engineers and technologists of forging and stamping shops, design organizations and the students of technical colleges.

Facilities: Gratitude is expressed to the members of shop design organizations and educational institution workers: Banenko, V. A., Borts, M. G., Bryukhanova, V. N., Glushkov, V. N. and others for practical information supplied.

No. of Russian and Slavic References: 70 (1934-50)

Available: Library of Congress.

BRYUKHANOV, A. N.

Method of determining progressive norms for metal consumption in forging. M. A. Sakhnovskiy. Reviewed by A. N. Bryukhanov. Sov. kniga No 8, 1952.

BRYUKHANOV, A.N., kandidat tekhnicheskikh nauk.

Establishment of norms for expenditure of metals in drop forging. (In: Ryzhkov, D.A., ed. Ekonomiia metallov v kuznechno-shtampovochnom proizvodstve. Moskva, 1953, p.38-46.) (MLRA 7:1)
(Forging) (Punching machinery)

BRYUKHANOV, A.N.; LAKHTIN, Yu.M.; MALYSHEV, A.I.; NIKOLAYEV, G.N.; SHUVALOV, Yu.A.; SHISHKOV, P.P., kandidat tekhnicheskikh nauk; dotsent, retsenzent; ARSHINOV, V.A., kandidat tekhnicheskikh nauk, retsenzent; LOSEV, I.S., inzhener, retsenzent; YEGORNOV, A.N., professor, redaktor; VYDRIN, P.G., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[The technology of metals] Tekhnologiia metallov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 624 p.
(Metals) (MLRA 7:11)

BRYUKHANOV, A.N., kand.tekhn.nauk, dots.

Magnitudes of final plastic deformations. [Nauch. trudy] MAMI no.4:91-99 '55.
(MIRA 11:10)
(Deformations (Mechanics))

BRYUKHANOV, Andrey Nikolayevich; LAKHTIN, Yuriy Mikhaylovich; MALYSHEV, Anatoliy Ivanovich; NIKOLAYEV, Grigoriy Nikolayevich; SHUVALOV, Yuliy Avraamovich; RYBIN, V.V., inzh., retsenzent; GLIKIN, N.M., kand. tekhn. nauk, red.; RZHAVINSKIY, V.V., red. izd-va; MODEL', B.I., tekhn. red.

[Technology of metals] Tekhnologiia metallov. Izd.2.,perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1959. 599 p.

(Metallurgy) (MIRA 14:7)

BRYUKHANOV, A.N.

25(1) PHASE I BOOK EXPLOITATION SOV/1586

Tekhnologicheskiy spravochnik po kovke i ob"yemnoy shtampovke (Handbook on Open and Closed Die Forging) Moscow, Mashgiz, 1959. 966 p. 15,000 copies printed.

Ed. (Title page): M.V. Storozhev; Ed. (Inside book): S.B. Kirsanova, Engineer; Ed. of Publishing House: B.M. Gliner, Engineer; Tech. Ed.: T. F. Sokolova; Managing Ed. for Information Literature (Mashgiz): V.I. Krylov, Engineer.

PURPOSE: The handbook is intended for engineers and technicians working in forging and die forming shops and in engineering design bureaus. It may also be used by teachers and students of technical schools.

COVERAGE: The handbook contains information on processes of forging and hot closed die forming as carried out on various kinds of forging and pressing machinery. Information is given on initial stock, making blanks, quality inspection of forgings and their heat treatment, and on engineering characteristics of basic machinery and mechanization equipment, on die making and on technical-economic indexes and engineering standardization. The authors state that problems of manufacture by forging and press forming which have only been discussed up to now in periodicals and special- ~~classified~~ ized literature are given in this handbook. No personalities are mentioned. There are 804 references, all Soviet.

Handbook on Open and Closed Die Forging SOV/1586

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Classification of hammer forgings 300
Kinds of forging dies and die impressions 301
The flash and its groove 317

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DRYUKHANOV, A.N.

25(1) PHASE I BOOK EXPLOITATION SOV/1586

Tekhnologicheskiy spravochnik po kovke i ob"yemnoy shtampovke (Handbook on Open and Closed Die Forging) Moscow, Mashgiz, 1959. 966 p. 15,000 copies printed.

Ed. (Title page): M.V. Storozhev; Ed. (Inside book): S.B. Kirsanova, Engineer; Ed. of Publishing House: B.M. Oliner, Engineer; Tech. Ed.: T. F. Sokolova; Managing Ed. for Information Literature (Mashgiz): V.I. Krylov, Engineer.

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Handbook on Open and Closed Die Forging SOV/1586.

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PHASE I BOOK EXPLOITATION SOV/1586

Tekhnologicheskiy spravochnik po kovke i ob"yemnoy shtampovke (Handbook on Open and Closed Die Forging) Moscow, Mashgiz, 1959. 966 p. 15,000 copies printed.

Ed. (Title page): M.V. Storozhev; Ed. (Inside book): S.B. Kirsanova, Engineer; Ed. of Publishing House: B.M. Gliner, Engineer; Tech. Ed.: T. F. Sokolova; Managing Ed. for Information Literature (Mashgiz): V.I. Krylov, Engineer.

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DRYUKHANOV, A.N.

25(1) PHASE I BOOK EXPLOITATION SOV/1586

Tekhnologicheskiy spravochnik po kovke i ob"yemnoy shtampovke (Handbook on Open and Closed Die Forging) Moscow, Mashgiz, 1959. 966 p. 15,000 copies printed.

Ed. (Title page): M.V. Storozhev; Ed. (Inside book): S.B. Kirsanova, Engineer; Ed. of Publishing House: B.M. Gliner, Engineer; Tech. Ed.: T. F. Sokolova; Managing Ed. for Information Literature (Mashgiz): V.I. Krylov, Engineer.

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25(1) PHASE I BOOK EXPLOITATION SOV/1586

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BRYUKHANOV, A.N.

25(1) PHASE I BOOK EXPLOITATION SOV/1586

Tekhnologicheskiy spravochnik po kovke i ob"yemnoy shtampovke (Handbook on Open and Closed Die Forging) Moscow, Mashgiz, 1959. 966 p. 15,000 copies printed.

Ed. (Title page): M.V. Storozhev; Ed. (Inside book): S.B. Kirsanova, Engineer; Ed. of Publishing House: B.M. Gliner, Engineer; Tech. Ed.: T. F. Sokolova; Managing Ed. for Information Literature (Mashgiz): V.I. Krylov, Engineer.

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PHASE I BOOK EXPLOITATION SOV/5310

Bryukhanov, Andrey Nikolayevich

Kovka i ob"yemnaya shtampovka (Open-Die and Die Forging) Moscow, Mashgiz, 1960. 375 p. Errata slip inserted. 18,000 copies printed.

Reviewer: M. V. Storozhev, Candidate of Technical Sciences; Ed. of Publishing House: Yu. L. Markiz, Engineer; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Hot-Processed Metals: S. Ya. Golovin, Engineer.

PURPOSE: This book is intended for students at mechanical engineering and polytechnical schools of higher education (including correspondence schools), specializing in "Machines and Processes in the Pressworking of Metals." It is to be used as a textbook for the course "Open-Die and Die Forging," and may also be useful to technical personnel in the forging industry.

COVERAGE: The book was originally approved by the Glavnoye upravleniye politekhnicheskikh i mashinostroitel'nykh vuzov

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(Main Administration for Polytechnical and Machine-Building Vuzes) on May 16, 1955. The present volume represents a revision only to the extent that slight changes have been made in the order of the presentation of the material. The book contains information on metals worked by forging, the effect of die forming on the properties of these metals, the thermal regime in the forging process, open-die forging, drop-forging, press forging, upset forging, forging on narrow-purpose machines, specialized forming processes, special features of die-forging nonferrous alloys, finishing trimming operations, and the inspection of forgings. No personalities are mentioned. There are 92 references: 91 Soviet, and 1 German.

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S/182/60/000/011/007/016
A161/A029

AUTHOR: Bryukhanov, A.N.

TITLE: On the Minimum of Stamping Tapers

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No.11, pp.25-27

TEXT: A graphical method is suggested for selecting the outer tapers for steel forgings (Fig. 3). The author points out that the state standard ГОСТ 7505-55 (GOST-7505-55) sets the outer and inner taper limit at 7° and 10°, respectively, for steel forgings made by stamping presses, but it is desirable to reduce the taper where this is possible in order to reduce the allowances for machining, as well as to facilitate the filling of the last die impression and raise its durability. The real obstacle for decreased taper is the increasing difficulty of the removal of ready forgings from the last die impression. In practice, the permissible minimum tapers sufficient for removal by hand (without mechanical ejectors) are being determined by the only method known in literature (Refs. 4, 6) with a table compiled for different relations between the width (b), height (h) and length (l) of forgings and various corrections to the table. This

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On the Minimum of Stamping Tapers

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method has been in use for 20 years. Diagrams presenting these table values and corrections prove that it takes into account the possible reduction of tapers with increased $\frac{1}{b}$ and desirable larger tapers for forgings with h below 30 and 50 mm, but this is not considered in the GOST 7505-55. Minding that shrinkage makes the forgings move away from the outer die walls but cling firmer to the protrusions inside the die, it is practiced to use inner tapers of 5, 7 and 10° at outer tapers of 3, 5 and 7°. Mostly the chosen tapers are near the permissible minimum, but sometimes they go beyond it, and sometimes they could be increased. As is known from practice, metal pressure on the outer tapers gradually drops to zero during shrinking, and then a gap forms between the outer tapers on the forging and the die walls, and the absolute shrinkage dimensions are directly proportional to the dimensions of the cooling forging. The suggested diagram (Fig. 3) makes possible the selection of outer tapers by the height (h) and width (b) of separate portions of a forging. The boundaries between application areas for the 3, 5 and 7° tapers for portions with $\frac{1}{b} < 1.5$ are indicated by solid lines and for portions with $\frac{1}{b} > 2$ by dashed lines.

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On the Minimum of Stamping Tapers

S/182/60/000/011/007/016
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The dimensions h, b and l must be determined in the old way, using the mentioned table. The following fact is emphasized: at $\frac{l}{b} < 1.5$ the die impression walls hold the ready forging evenly or almost evenly from all sides; at $\frac{l}{b} > 1.5-2$ the hold of two walls weakens first due to increasing shrinkage with an increase in length. This doubtlessly facilitates the removal and the taper can be reduced. If the inner forging walls are no more than 25-30 mm apart, the inner tapers may be taken to be equal to the outer tapers for the given portion in the forging. But if the walls are spaced wider than 25-30 mm (without regard to the presence or absence of protrusions), the inner taper must be equal to the outer, and in view of the effect of shrinkage it is better to use the next larger taper angle, i.e., inner tapers of 5, 7 and 10° are to be used with 3, 5 and 7° outer tapers. The old and the proposed methods are compared in two diagrams (Fig. 4 and 5) and it is concluded that the new method will yield the following results: 1) an insignificant increase of tapers in one narrowly limited zone of dimensions and two small zones; 2) unchanged tapers for most forgings being stamped in impressions with up to 60 mm depth at $\frac{l}{h} < 1.5$ (see Fig. 4)

Card 3/7

On the Minimum of Stamping Tapers

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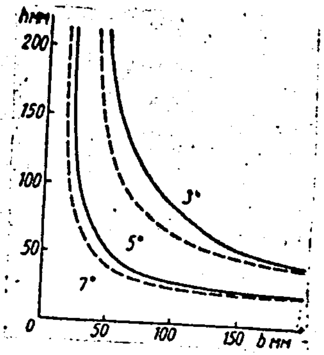
and up to 90 mm depth at $\frac{l}{b} > 2$ (see Fig. 5); 3) a considerable decrease of tapers on high forgings, particularly on high forgings with slight width. The new method can result in a considerable economy of metal. There are 5 figures and 7 Soviet references.

Card 4/7

Fig. 3 - The suggested diagram



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On the Minimum of Stamping Tapers

S/182/60/000/011/007/016
A161/A029

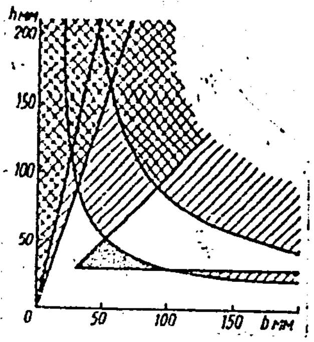

Fig. 4 - Comparison of the old and new methods for determining tapers at $\frac{l}{b} <$ < 1.5

☐ taper not changed;

▒ taper increases by 2°;

▨ taper decreases by 2-3°;

▩ taper decreases by 4-5°

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On the Minimum of Stamping Tapers

S/182/60/000/011/007/016
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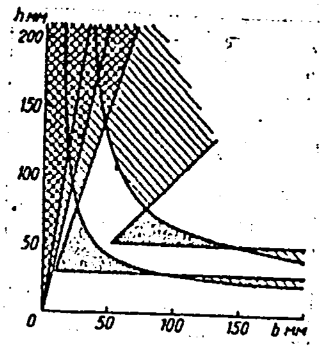
Fig. 5 - Comparison of the old and new methods for determining the tapers at $\frac{l}{b} > 1.5 - 2$



Card 7/7

RADYUCHENKO, Yuriy Sergeyevich; BRYUKHANOV, A.N., kand. tekhn. nauk, retsenzent; SYTNIK, N.A., inzh., red.; SMIRNOVA, G.V., tekhn. red.

[Rotary forging; shaping parts on rotary-and radial-forming machines] Rotatsionnaia kovka; obrabotka detalei na rotatsionno- i radial'no-obzhimnykh mashinakh. Moskva, Mashgiz, 1962. 185 p. (MIRA 15:3)

(Forging)

S/182/62/000/002/001/005
D038/D112

AUTHORS: Maksimov, A.I., Kunitsa, N.S. and Bryukhanov, A.N.

TITLE: On the effect of the rate of change of the deformation resistance on the accuracy of cold flat sizing

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 2, 1962, 5-8

TEXT: The authors examined the effect of the sizing allowance, contact friction and strength properties of the forging material on the accuracy of cold flat sizing, as these factors had not been sufficiently studied. Sizing must guarantee a certain standard of surface finish and dimensional accuracy before it can replace cutting operations. It was found that: (1) the achieved sizing accuracy in dies without stops depends on the rate of change of the deformation resistance; the lower this rate is, the more accurate the sizing is. Increasing the sizing allowance increases the sizing accuracy, which explains why lubricants permitted reducing the deformation effort and increasing the accuracy of flat sizing; (2) the harder the metal, the less the accuracy of flat sizing; for higher accuracy, the forgings ought to be sized after annealing or normalizing. The above research was done in 1961 by the kafedra obrabotki metallov VZMI (Department of Metal Work-

Card 1/2

S/182/62/000/002/001/006
D038/D112

On the effect of the rate .....

ing of the VZMI); the experimental work was done on a 1000-ton-capacity embossing press at the forge shop of the Vladimirskiy traktornyy zavod (Vladimir Tractor Plant) by A.I. Maksimov and V.N. Kulikovskiy. The laboratoriya mekhanicheskikh ispytaniy Avtozavoda im. Likhacheva (Laboratory of Mechanical Tests of the Automobile Plant im. Likhachev) calibrated the specimens used for determining the flexible characteristics of the die-press system on a 100-ton capacity testing press. A.I. Maksimov and M.G. Parun-Sarkisov are mentioned. There are 3 figures, 3 tables and 5 Soviet-bloc references.

Card 2/2

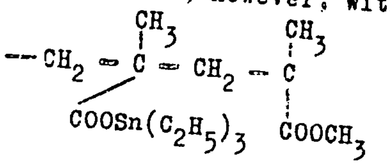
S/056/62/042/002/051/055
B108/B138

AUTHORS: Bryukhanov, V. A., Gol'danskiy, V. I., Delyagin, N. N., Makarov, Ye. F., Shpinel', V. S.

TITLE: Mössbauer effect in tin-containing polymer

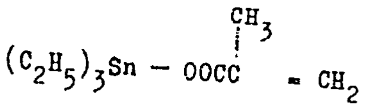
PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 2, 1962, 637-639

TEXT: Mössbauer effect in polymers is very weak because polymers usually contain only light nuclei and have no distinct crystal structure. Successful studies were made, however, with the tin-organic compound



$$-CH_2-\underset{COOSn(C_2H_5)_3}{\overset{CH_3}{C}}-CH_2-\underset{COOCH_3}{\overset{CH_3}{C}}$$

which is the copolymer



$$(C_2H_5)_3Sn-OO\overset{CH_3}{C}C=CH_2$$

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Mössbauer effect in tin- ...

S/056/62/042/002/051/055
B108/B138

in methylmetacrylate. The tin content in the transparent solid (1.2 g/cm^3) specimens was 30% by weight. The synthesis of the polymer was described earlier by M. F. Shostakovskiy et al. (ZhPKh, 31, 1434, 1958). The resonance absorption spectra (relative counting rate versus velocity of absorber relative to gamma source) have two equal lines at 0 ± 0.2 and 3.0 ± 0.2 mm/sec with a width of 0.8 mm/sec each. This width is somewhat greater than twice the natural width of the excited (23.8 kev) level of Sn^{119}. It is supposed that the observed spectrum is due to quadrupole interaction of excited S^{119} nuclei with the nonuniform electric field around the tin atoms in the molecules of the polymer. Another way of interpreting the splitting of the lines is to assume two states of the tin in the polymer molecules, which differ in the density of the orbitals at the site of the nucleus. The resonance absorption probability for gamma quanta without recoil (f') was 0.04 at 77°K and about 0.017 at 195°K. The possibility of observing the Mössbauer effect on impurity nuclei in solid solutions is pointed out. D. A. Kochkin and Yu. M. Kagan are thanked for help and discussions. There are 1 figure and 7 references: 6 Soviet and 1 non-Soviet.

Card 2/3

Mössbauer effect in tin- ...

S/056/62/042/002/051/055
B108/B138

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR). Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: December 13, 1961

✓

Card 3/3

BRYUKHANOV, A.N.

Answering I.D.Brin's letter. Kuz.-shtam. proizv. 4 no.1:
3 of cover Ja '62.
(MIRA 17:3)

S/182/63/000/001/003/012
A004/A126

AUTHOR: Bryukhanov, A. N.

TITLE: Answer to the article by V. S. Goffenshefer "On the magnitude of die rakes"

PERIODICAL: Kuznechno-shtampovochnoye.proizvodstvo, no. 1, 1963, 7 - 9

TEXT: In his answer to Goffenshefer's article in the same number of "Kuznechnoshtampovochnoye proizvodstvo", the author emphasizes the importance of metal shrinkage for determining die rakes and, to clear up the effect of shrinkage on the rake magnitude, he tries to give a definition of outer and inner rakes. Then he comments on the new facts given by Goffenshefer who, in determining the rake, even took into consideration the cooling rate, and maintains that the rake magnitudes suggested by the former cannot be recommended in every case. He cites a number of examples proving that, in particular, too small rakes are not to be considered favorable. The author, however, admits that Goffenshefer is right in stating that a number of inner rakes recommended by the author are insufficient in some cases. There are 2 figures.

√

Card 1/1

MAKSIMOV, A.I.; KUNITSA, N.S.; BRYUKHANOV, A.N.

Investigating and setting up the process of cold level sizing with limiting devices. Kuz.-shtam. proizv. 4 no.9:1-6 S '62. (MIRA 15:9)

(Forging)

BRYUKHANOV, A.N.

Response to V.S.Goffenshefer's article "Size of draft angles."
Kuz.-shtam. proizv. 5 no.1:7-9 Ja '63. (MIRA 16:2)
(Forging) (Goffenshefer, V.S.)

L 24782-66 EWT(1)/EWA(h)

ACC NR: AP6007836

SOURCE CODE: UR/0120/66/000/001/0192/0193

AUTHOR: Bryukhanov, A. S.; Grib, V. N.; Lazarenko, V. N.

30

B

ORG: Electron Microscope and Electronic Automation Plant, Sumy (Zavod elektronnykh mikroskopov i elektroavtomatiki)

TITLE: A high-voltage square pulse generator 25 with 75 kv output isolation

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 192-193

TOPIC TAGS: pulse generator, pulse shaper, thyratron, cathode follower

ABSTRACT: The authors recommend changes in the circuit of the high voltage pulse generator described in previous articles (V. A. Zamkov, PTE, 1957, No 3, 73; G. A. Martynoy, PTE, 1959, No 5, 139; K. G. Finogenov, PTE, 1963, No 4, 184) to increase the output pulse with 75 kv output isolation. The generator is based on TGI1-90/8 thyratrons. The parasitic induction level may be reduced by shunting the grid circuits with a large capacitor and using a low-impedance cathode-follower output based on four 6Zh11P tubes. The proposed modifications give an output pulse amplitude of up to 15 kv. The operation of the generator is described. Output isolation is achieved by using pulse transformers to separate the input circuits and power transformers on the supply side. The high voltage sections of the transformers are separated by at least 10 mm of insulation. The pulse amplitudes may be controlled from 2 to 15 kv with

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UDC: 621.373

L 24782-66

ACC NR: AP6007836

pulse durations from 200 μsec to 100 msec. The flat section of the pulses show no more than a 0.5% drop with a load of 400 MΩ. The prf is 5 cps and the average power of the high-voltage supply is less than 7 w. Series connection of several thyratrons or the use of higher voltage thyratrons would be required for a further increase in the pulse amplitude. Orig. art. has: 3 figures.

SUB CODE: 09/ SUBM DATE: 07Jan65/ ORIG REF: 004/ OTH REF: 000

Card 2/2 MGS

BRYUKHANOV, A.V.

ZAITOV, I.R.; ZABIROV, R.D.; KNIZHNIKOV, Yu.F.; BRYUKHANOV, A.V.

Large-scale phototheodolite surveying of Tien Shan glaciers in 1955. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 12 no.1: 229-235 '57. (MIRA 10:11)

1. Kafedra kartografii Moskovskogo gosudarstvennogo universiteta.
(Tien Shan--Glaciers) (Photographic surveying)

BRYUKHANOV, A.V.

3(3,4) PHASE I BOOK EXPLOITATION SOV/2355

Moscow. Universitet. Geograficheskiy fakul'tet.

Informatsionnyy sbornik o rabotakh Geograficheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta po Mezhdunarodnomu geofizicheskomu godu, No 1 (Collection of Information on Work Done by the Geography Department of Moscow University for the International Geophysical Year, Nr 1) Moscow, 1958. 298 p. Errata slip inserted, 800 copies printed.

Resp. Ed.: G. K. Tushinskiy, Professor

PURPOSE: This book is intended for earth scientists, particularly those interested in glacial phenomena.

COVERAGE: This book describes the activities of the Geography Department of Moscow State University in connection with International Geophysical Year. The work is divided into 4 parts, each dealing with a specific regional expedition. These are: the Mount Elbrus Expedition, the Khibiny Expedition, the Pamir Expedition, and the Antarctic Expedition. Additional articles discuss problems in glaciology and research techniques. References accompany each article.

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Collection of Information on Work Done by the (Cont.) SOV/2355

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THE I.G.Y. KHIBINY EXPEDITION

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AVAILABLE: Library of Congress

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MM/fal
9-18-59

BRYUKHANOV, A.V.; ZAITOV, I.R.; LAPPO, I.A.

Contents and symbols of large-scale glacier maps. Inform. sbor. o rab. Geog. fak. Mosk. gos un po Mezhdunar. geofiz. godu no.1:111-123 '58. (MIRA 12:3)

(Glaciers--Maps)

BRYUKHANOV, A. V.

"Investigating the Phenomenon of Elastic After-effect of Carbon Steels." Cand Phys-Math Sci, Moscow Pedagogical Inst, Moscow, 1954. (RZhKhim, No8, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

BRYUKHANOV, A.V.

AUTHOR BRYUKHANOV A.V. 20-5-28/67

TITLE On the Problem of the Elastic Relaxation in Carbonaceous Steels. (K voprosu ob uprugom posledeystvii v uglerodistykh stalyakh.- Russian)

PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 5, pp 1046-1049 (USSR).

ABSTRACT The beginning of the paper under review gives a survey on the present state of the above problem. The paper contains the results of the investigation of the elastic relaxation of the low-in-carbon steel U2 and of the eutectoid steel U8. The investigation was conducted by testing standard samples with respect to stretch by means of an appropriate machine. The samples were made of bar steel that had been subjected to a preliminary heat treatment. Out of each steel, coarse-grained, middle-grained, and fine-grained samples were made. The analysis of the results permits to draw the following conclusions:

(1) The effect of the inverse elastic relaxation depends on the duration of the time during which the sample is loaded.
(2) It is not possible to describe by a simple potential expression the dependence of the inverse elastic relaxation on the duration of observation. In the beginning of the process, the experimental curves do not follow the exponential law. The intensity and the duration of these deviations increase if the duration

CARD 1/3

20-5-28/67

On the Problem of the Elastic Relaxation in Carbonaceous Steels.

of the loading of the sample is prolonged. The linear zones of the curve are characterized by the relaxation time T_1. If the duration of loading is prolonged, also T_1 increases.
(3) The occurrence of an elastic inverse relaxation depends on the structure of the samples. In the fine-grained samples the dependence of this relaxation on the duration of loading of the sample is more distinct than in the other samples. The same is true also of the deviation of the time dependence of the inverse elastic relaxation of the deformation on the exponential law. The author of the paper under review gives the following formula for the time dependence of the inverse elastic relaxation:

$$\varepsilon_{\infty} - \varepsilon = \int_0^{\infty} A(\tau) e^{-t/\tau} d\tau$$

with A(T) denoting the distribution function that satisfies the normalization condition. The grossly approximate integration of this expression yields

$$\varepsilon_{\infty} - \varepsilon = (B/t)(e^{-t/\tau'} - e^{-t/\tau''}),$$

with B denoting a certain constant, and t standing for the time that is counted from the moment of the removal of the load on. Therefore it is possible to accept as valid the following formula

20-5-28/67

On the Problem of the Elastic Relaxation in Carbonaceous Steels.

for the interrelationship between the duration of relaxation and the elastic tension and the absolute temperature:

$$T' = T_0 e^{Q/T} / \sigma.$$

(3 reproductions)

ASSOCIATION: Moscow Municipal Pedagogic Institute "V.P. Potemkin"
PRESENTED BY: P.A. Rebinder, Member of the Academy, 29.12. 1956
SUBMITTED: 30.6. 1956
AVAILABLE: Library of Congress.

CARD 3/3

BRYUKHANOV, AV

137-58-2-3962

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 242 (USSR)

AUTHOR: Bryukhanov, A.V.

TITLE: On the Elastic Aftereffect in Polycrystalline Metals (K voprosu ob uprogom posledeystvii v polikristallicheskikh metallakh)

PERIODICAL: Uch. zap. Mosk. gos. ped. in-t, 1957, Nr 101, pp 55-61

ABSTRACT: Bibliographic entry. Ref. RzhMet, 1957, Nr 12, abstract 24931.

1. **Metals--Elasticity--Bibliography**

Card 1/1

BRYUKHANOV, A.V.

Phototheodolite operations on Mount Elbrus between 1956 and 1959. Inform.sbor. o rab. Geog. fak. Mosk. gos. un. po Mezhdunar. geofiz. godu no.7:14-61 '61. (MIRA 15:11)
(Elbrus, Mount--Aerial photogrammetry)

AKIF'YEVA, K. V.; BELINSKIY, V. A.; BRYUKHANOV, A. V.; VLADIMIROVA, G. A.; MAKHOVA, Yu. V.; MALINOVSKAYA, N. M.; MYAGKOV, S. M.; NORMAN, E. A.; SEMEKHIN, Yu. V.; TARASOV, G. K.; TUSHINSKIY, G. K.; UTYAKOV, P. A.; FAMINTSYN, B. M.; SHATERNIKOVA, I. S.; SHANSHIYEV, K. M.

Estimation of the danger of avalanches in high mountain areas designated for development. Inform. sbor. o rab. Geog. fak. Mosk. gos. un. po. Mezhdunar. geofiz. godu no.8:27-163 '62. (MIRA 16:1)

(Caucasus—Avalanches)

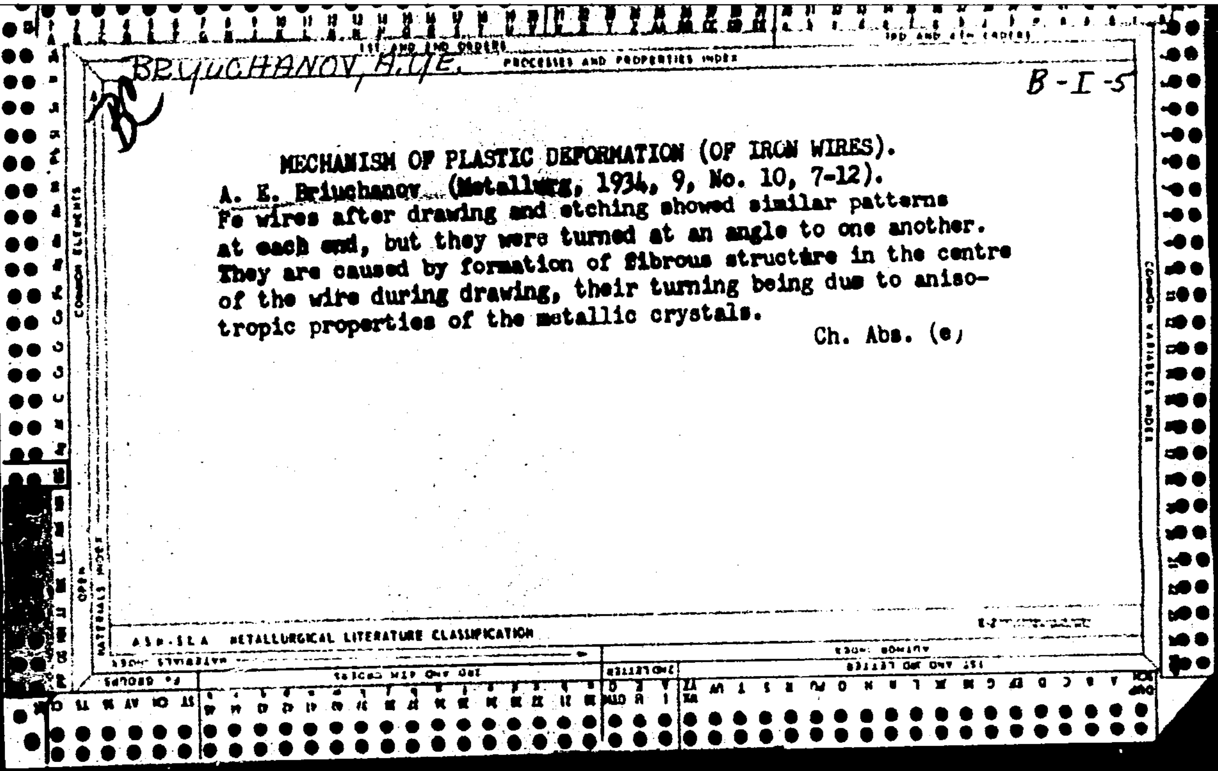
1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

Production of steel and cast iron castings with surfaces saturated with chromium, manganese and other metals A. K. Bryukhanov. *Metallurg.* 9, No. 5, 31 (1934). Molds were lines with a paste of Fe-Cr or Fe-Mn about 1 mm. thick. Micrographs show diffusion of Cr and Mn into the castings up to a max. depth of 10 mm.

H. W. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION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BRYUCHANOV, A.YE.

B-I-5

MECHANISM OF PLASTIC DEFORMATION (OF IRON WIRES).

A. E. Briuchanov (Metallurg, 1934, 9, No. 10, 7-12). Fe wires after drawing and etching showed similar patterns at each end, but they were turned at an angle to one another. They are caused by formation of fibrous structure in the centre of the wire during drawing, their turning being due to anisotropic properties of the metallic crystals.

Ch. Abs. (e)

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

BRECHANOV A.

PROCESSES AND PROPERTIES INDEX

BC

B-I-5

Analysis of the rolled and recrystallisation texture in sheet iron from moduli diagrams. A. Bačchanov (Tech. Phys., U.S.S.R., 1936, 3, 209—219).—The elastic properties of sheet Fe have been studied by bending vibrations and harmonic analysis of the moduli diagrams. The structure is anisotropic, with two forms, cubic and icositetrahedral (*a*, *b*), the orientation of which depends on the direction of rolling. On heating at 780° recrystallisation occurs, and the orientation changes. The proportion of crystallites changes (*a*) 7—10%, (*b*) 20—17%. After heating at 900° the structure is almost isotropic.

R. S. B.

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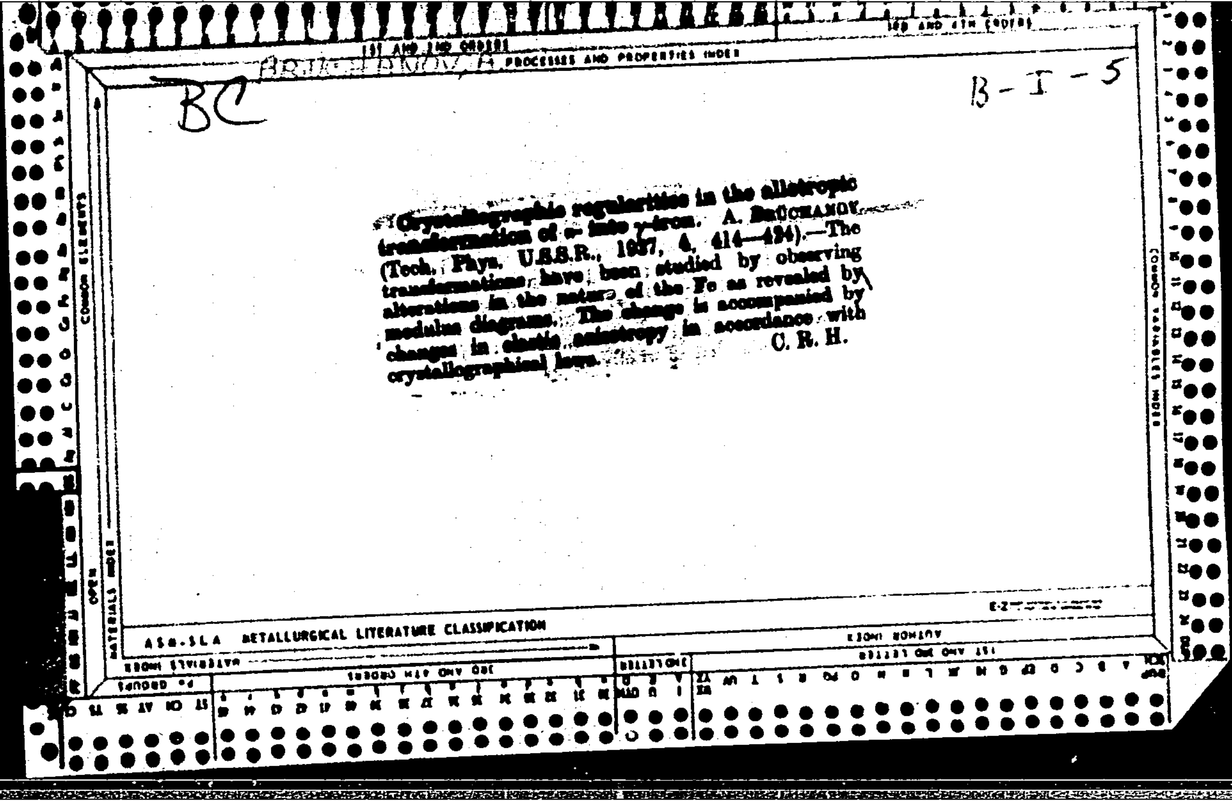
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BRUCHANOV, A

BC

B-I-5

Crystallographic regularities in the allotropic transformation of α- into γ-iron. A. Bruchanov. (Tech. Phys. U.S.S.R., 1937, 4, 414—424).—The transformations have been studied by observing alterations in the nature of the Fe as revealed by modulus diagrams. The change is accompanied by changes in elastic anisotropy in accordance with crystallographical laws. C. R. H.

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

BRUHANOV, A. E.

3

"Laws of the Development of a Fibrous Structure in Copper as a Result of Its Plastic Deformation by Rolling. A. E. Bruhanov (*Zhur. Tekh. Fiziki (J. Tech. Physics)*, 1937, 7, (22), 2065-2083).—[In Russian.] The dependence of elasticity on direction in rolled copper sheet is investigated theoretically. Discussion of the results with reference to the [110] direction shows that elastic anisotropy is a maximum on the dodecahedral planes, whilst the octahedral planes possess absolute elastic isotropy. Experimental data are given for a sheet of copper, 6 mm. thick, annealed at 800° C., and rolled with reductions of 5, 10, . . ., up to 75%. A diagram giving the elasticity as a function of the orientation is compiled, using measurements of the inherent vibration frequency of the sheets. An elastic anisotropy appeared at once on starting to roll; it was 3·6% at 15% reduction, and 14·5% at 75%. The elastic modulus was a maximum in the direction normal to that of rolling, and a minimum at angles of 36°-54° to the rolling direction. Several samples were annealed at temperatures between 100° and 700° C. for different times in order to ensure recovery, and to make possible a comparison between the preferred orientation and elastic anisotropy. For all these samples curves connecting elasticity and deformation were drawn and compared with X-ray patterns.—N. A.

COMMON ELEMENTS

OPEN

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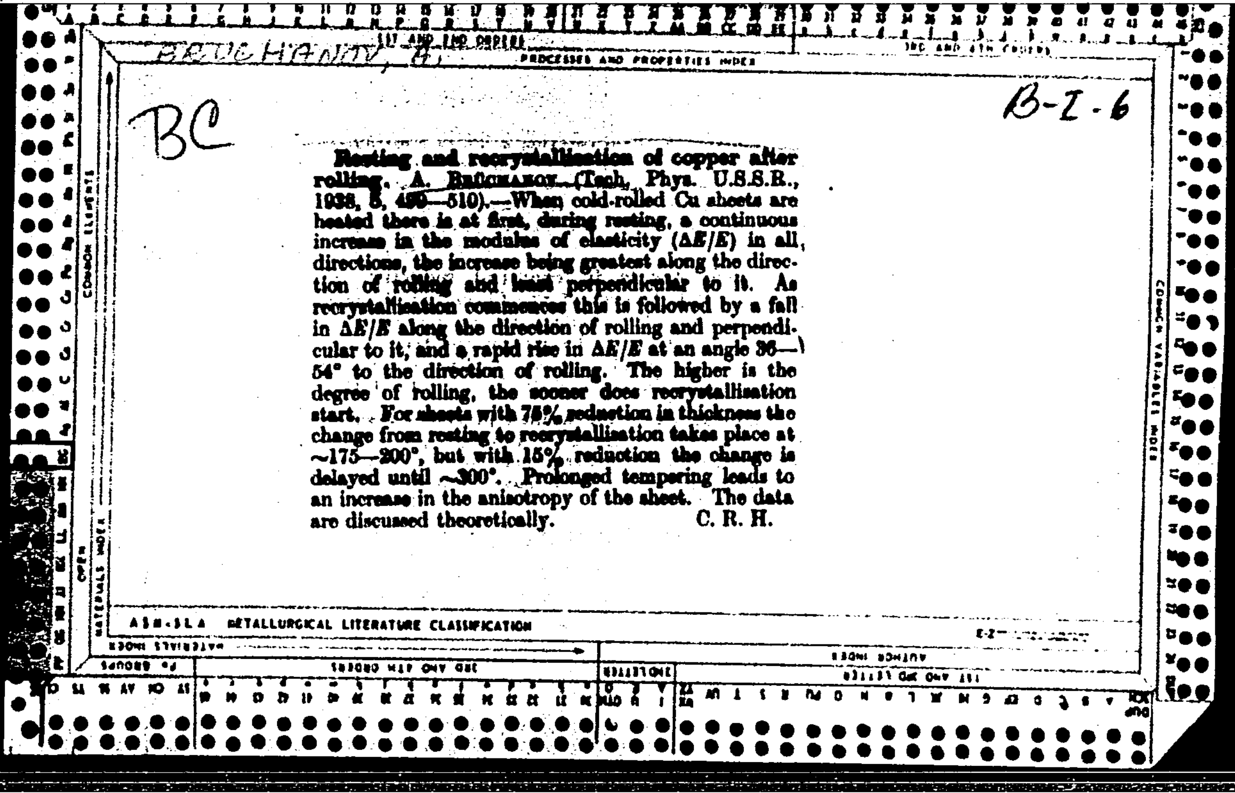

BRUCHANOV, A.

1ST AND 2ND ORDERS

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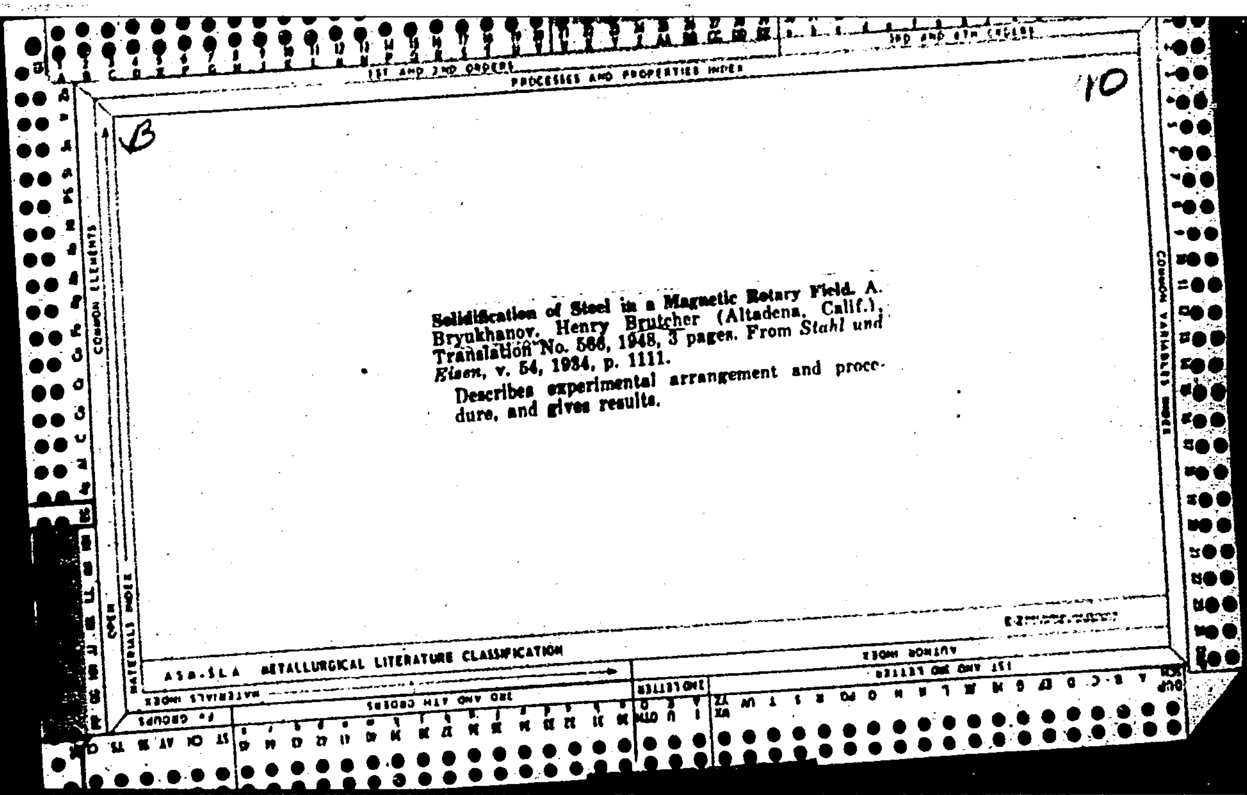
BC

B-I-6

Resting and recrystallisation of copper after rolling. A. Bruchanov. (Tech. Phys. U.S.S.R., 1938, 5, 499—510).—When cold-rolled Cu sheets are heated there is at first, during resting, a continuous increase in the modulus of elasticity ($\Delta E/E$) in all directions, the increase being greatest along the direction of rolling and least perpendicular to it. As recrystallisation commences this is followed by a fall in $\Delta E/E$ along the direction of rolling and perpendicular to it, and a rapid rise in $\Delta E/E$ at an angle 36—54° to the direction of rolling. The higher is the degree of rolling, the sooner does recrystallisation start. For sheets with 75% reduction in thickness the change from resting to recrystallisation takes place at ~175—200°, but with 15% reduction the change is delayed until ~300°. Prolonged tempering leads to an increase in the anisotropy of the sheet. The data are discussed theoretically. C. R. H.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION


1ST AND 2ND ORDERS
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3RD AND 4TH ORDERS
COMMON ELEMENTS
COMMON VARIABLES INDEX
MATERIALS INDEX
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AUTHOR INDEX
1ST AND 2ND LETTER
SUBJECT
3RD AND 4TH ORDERS
MATERIALS INDEX

10

B

Solidification of Steel in a Magnetic Rotary Field. A. Bryukhanov. Henry Brutcher (Altadena, Calif.), Translation No. 566, 1948, 3 pages. From *Stahl und Eisen*, v. 54, 1934, p. 1111.

Describes experimental arrangement and procedure, and gives results.

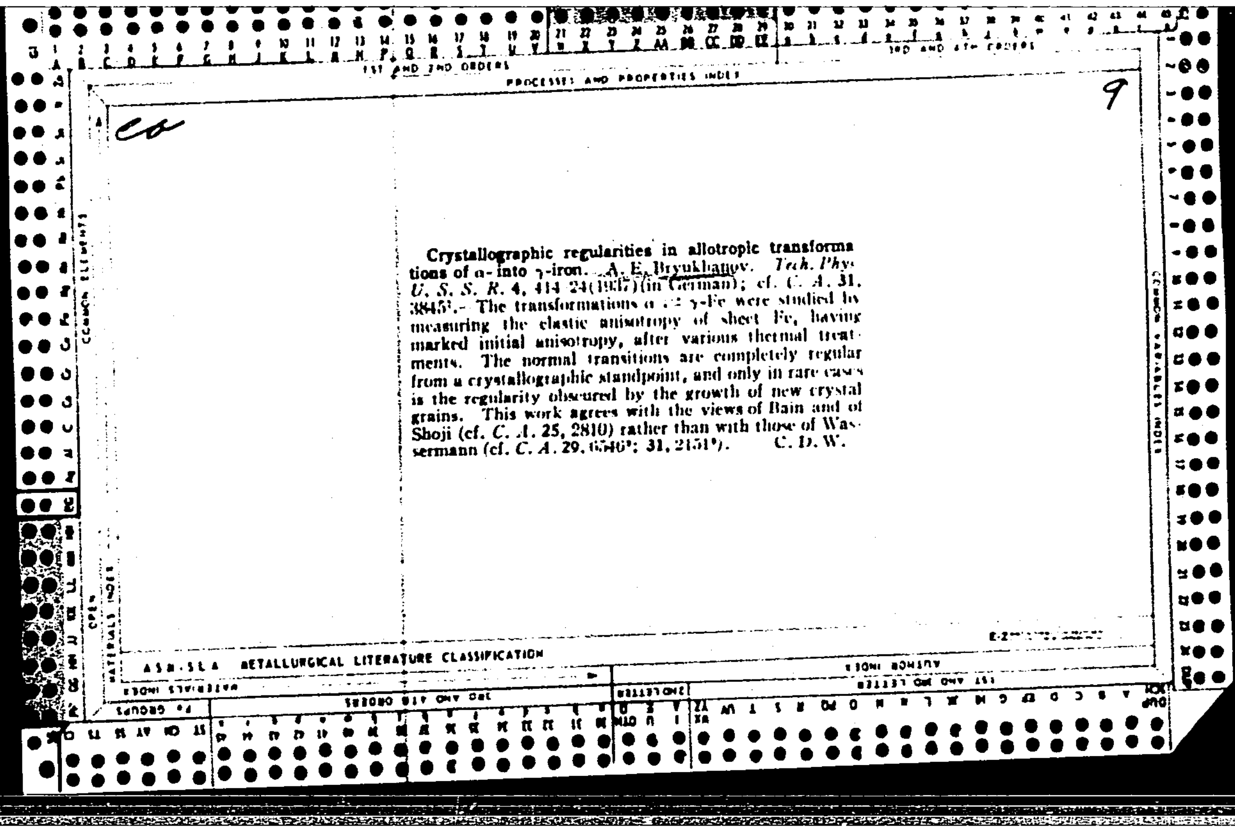
PROCESSES AND PROPERTIES INDEX

Ca

7

Analysis of the rolled and recrystallization texture in sheet iron from modulus diagrams. A. K. Bryukhanov. *Tech. Phys. U. S. S. R.* 3, 209-10(1936). The elastic properties of sheet Fe have been studied by bending vibrations and harmonic analysis of the modulus diagrams. The structure is anisotropic, with 2 forms, cubic and tetrahedral (*a*, *b*), the orientation of which depends on the direction of rolling. On heating at 700° recrystn. occurs, and the orientation changes. The proportion of crystallites changes *a* 7-15%, *b* 30-17%. After heating at 900° the structure is almost isotropic. B. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION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3RD AND 4TH ORDERS
COMMON ELEMENTS
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ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Co

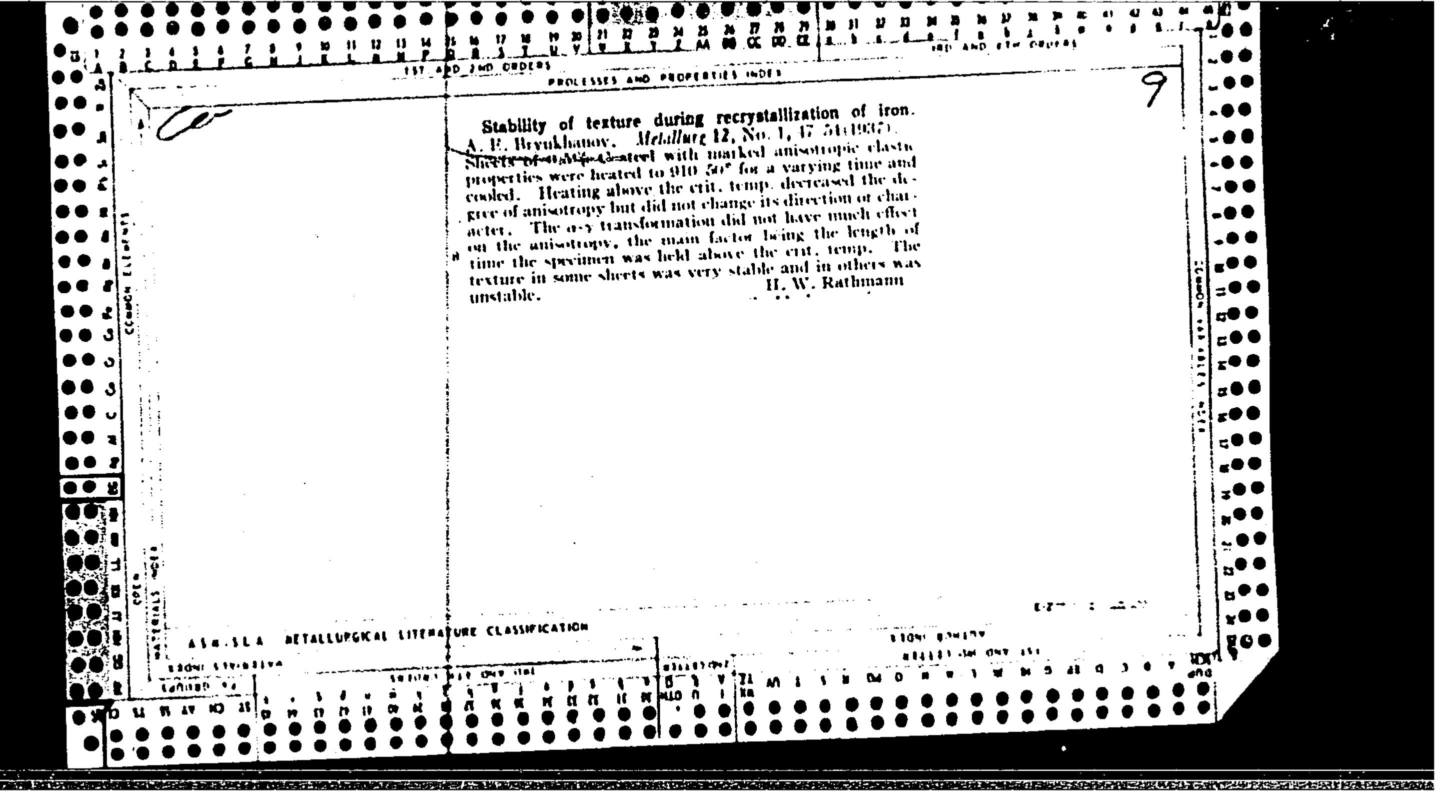
9

Crystallographic regularities in allotropic transformations of α- into γ-iron. A. E. Bryukhanov. *Tech. Phys. U. S. S. R.* 4, 414-24(1937)(in German); cf. *C. A.* 31, 3845³.- The transformations α ⇄ γ-Fe were studied by measuring the elastic anisotropy of sheet Fe, having marked initial anisotropy, after various thermal treatments. The normal transitions are completely regular from a crystallographic standpoint, and only in rare cases is the regularity obscured by the growth of new crystal grains. This work agrees with the views of Bain and of Shoji (cf. *C. A.* 25, 2810) rather than with those of Wassermann (cf. *C. A.* 29, 6546⁹; 31, 2151⁹). C. D. W.

PROCESSES AND PROPERTIES INDEX

The laws of the development of the texture of copper during plastic deformation by rolling. A. Bryukhanov. ~~Theoretical~~
Tech. Phys. U. S. S. R. 4, 1027-44(1937).
equations for the dependence of the modulus of elasticity
on direction in various crystallographic planes are derived.
Sheet Cu was given from 6 to 75% reduction and the modu-
lus at various angles to the direction of rolling was calcd.
from the frequency of oscillation of the laminae. The
ratio of the amplitudes of the harmonics on the face [112] s
does not agree with known value. An orientation of the
crystal was worked out that agreed with the x-ray diffrac-
tion patterns, the observed ratios of amplitude of the
harmonics and the equation for elastic anisotropy. This
orientation uses as coördinates the fundamental directions
of deformation (normal to the plane of rolling, the direction
of rolling, and cross rolling). The texture is the same for
all amts. of reduction and is characterized by a plane lying
parallel to the plane of rolling, close to (124)-(135) and c
parallel to rolling at about [112]. As the amt. of reduc-
tion increases, a larger no. of grains assume the orienta-
tion of the texture.
James W. Poynter

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

9

Ca

Stability of texture during recrystallization of iron. A. P. Bryukhanov. *Metallurg* 12, No. 1, 47-54(1937). Sheets of [illegible] steel with marked anisotropic elastic properties were heated to 910-50° for a varying time and cooled. Heating above the crit. temp. decreased the degree of anisotropy but did not change its direction or character. The α-γ transformation did not have much effect on the anisotropy, the main factor being the length of time the specimen was held above the crit. temp. The texture in some sheets was very stable and in others was unstable.

H. W. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

SA

A 548
A

25. Point of elastic isotropy in rock-salt. A. BRIUKHANOV. *J. of Exp. and Theor. Phys. U.S.S.R.*, 9, 6, *pp.* 722-724, 1939. *In Russian.*—Young's modulus was measured for rock-salt as a function of temperature in the (100) and (110) directions from 0° C. to 500° C., and a linear decrease found. The moduli became equal (*i.e.*, the crystal became elastically isotropic) at about 440° C. The method of measurement was to compare the (acoustic) frequency of natural vibration with that of a stretched wire.
D. S.

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

M

3

Recovery and Recrystallization of Metals with Cubic Symmetry After Cold Rolling. A. E. Bryukhanov (*Zhur. Tekhnich. Fiziki* (*J. Tech. Physics*), 1939, **9**, 1745-1753; C. Abs., 1940, **34**, 2767).—Cf. preceding abstract. Annealing at 225°-250° C. increases *E* for rolled brass sheet irrespective of direction; annealing at 300°-750° C. increases *E* in, and strongly reduces it normal to, the rolling direction. The elastic anisotropy has a minimum at 300°-400° C. X-ray patterns show a recrystallization between 215° and 300° C.; the new texture is destroyed above 400° C. *E* for rolled aluminium at an angle of 36-54° rises with temperature of annealing; at other angles it rises to 250° C. and then decreases again.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

M

***Development of Texture in Sheets of Brass, Aluminium, and Duralumin on Rolling.** A. E. Bryukhanov (*Zhur. Tekhnich. Fiziki* (*J. Tech. Physics*), 1939, 9, 1754-1762; (C. Abs., 1940, 34, 2767).—[In Russian.] Cf. *Met. Abs.*, 1939, 6, 408. Young's modulus E for a rolled sheet of brass (zinc 38%) has a maximum value normal to the rolling direction, and a minimum in this direction or at an angle of 18°–36° to it. For aluminium and Duralumin $E_{max.}$ is usually normal to the rolling direction and $E_{min.}$ at 36°–54° to it. The *elastic anisotropies* $(E_{max.} - E_{min.})/E_{min.}$ for brass, aluminium, and Duralumin are approximately in the ratio 21 : 6 : 5. These data and X-ray patterns indicate that after a short rolling of brass the (135) face is in the plane, and the [21$\bar{1}$] direction in the direction of rolling; after heavy rolling (110) is parallel, and [112] normal to this direction. In rolled aluminium (135) is in the plane, and [21$\bar{1}$] in the direction of rolling.

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

BRYUKHANOV, A. YE.

USSR/Physics
Magnetization
Permalloy

Apr 1948

"In Connection With the Observations of Ya. S. Shur and R. I. Yanus of the Ural Affiliate of the Academy of Sciences USSR," N. G. Ardasheva, A. Ye. Bryukhanov, Inst of Phys, Odessa State U, 3¼ pp

"Zhur Tekh Fiz" Vol XVIII, No 4

Criticize subject observations to the effect that Shur and Yanus in their criticism failed to suggest corrections for the various errors which they claimed existed in the article on which they made their observations.

Submitted 19 Jun 1947

PA 64T93

L 36846-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) JW/JD/HW

ACC NR: AP6019505 SOURCE CODE: UR/0129/66/000/006/0039/0041

AUTHOR: Bryukhanov, A. A.; Baranovskaya, Z. A.; Bryukhanov, A. Ye. 53

ORG: Odessa State University (Odesskiy gosudarstvennyy universitet) B

TITLE: Rolled structure and elastic anisotropy of Kovar alloy 16

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 6, 1966, 39-41

TOPIC TAGS: cold rolling, crystal anisotropy, Young modulus

ABSTRACT: The starting material for the investigation was a cold rolled Kovar sheet 2 mm thick. Previous X ray study showed that in its initial state the alloy had a face centered cubic lattice, with its constant a = 3.58 Å. The density of the alloy, measured by the standard weight method, was 8.92 grams/cm^3. Samples were cut from the sheet at various angles to the direction of rolling; the Young modulus of these samples was measured. After measurement of the Young modulus in the initial state, the samples were annealed, after which the Young modulus was again measured. It was found that the degree of anisotropy depends on the annealing temperature. The index a increases up to 500°C, reaches a maximum value of 16% and, after annealing at 600°C, decreases sharply

Card 1/2 UDC: 620.186.4:620.186.5:669.12.782

L 36846-66

ACC NR: AP6019505

to 5.5% and does not change thereafter with higher annealing temperatures. Orig. art. has: 2 figures.

SUB CODE: 11, 20/ SUBM DATE: none.

Card 2/2

LOSHKAREV, A.I., inzh.; BRYUKHANOV, B.N., inzh.

Some results of the investigation of a centripetal gas turbine with nozzle control. Izv. vys. ucheb. zav.; mashinostr. no.2:208-223 '63. (MIRA 16:8)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

BRYUKHANOV, G., inzh.; SHAPIRO, G., inzh.

Using gravel for semi-impregnation of pavements. Avt.dor. 20 no.8:18-19 Ag '57.
(MIRA 12:4)

(Pavement, Bituminous)

BRYUKHANOV, I.M.

Chemical composition of water in the well of Lake Abalakh.
Nauch. soob. IAFAN SSSR no.3:91-93 '60. (MIRA 16:3)
(Abalakh Lake--Mineral waters--Composition)

BRYUKHANOV, K.F.; PRUDNIKOV, A.I.

Reconditioning the cylinder head on an internal combustion motor. Sakh. prom. 27 no.8:36-37 Ag '53. (MLRA 6:8)

1. Zherdevskiy sakharnyy zavod. (Diesel motor)

BRYUKHANOV, K.F.; PRUDNIKOV, A.I.

Device for straightening blades from diffusion apparatus. Sakh.prom. 27 no.8:37 Ag '53. (MLRA 6:8)

1. Zherdevskiy sakharnyy zavod. (Sugar machinery)

BRYUKHANOV, K.F.; GRIZODUBOV, I.

Experience of a school for the study of the best and complete method of boiling massecuite of the first product. Sakh.prom. 28 no.2:25-27 '54. (MLRA 7:4)

1. Voronezhskiy sakhsveklotrest (for Bryukhanov). 2. Gruppovaya laboratoriya Voronezhskogo sakhsveklotresta (for Grizodubov).
(Sugar research)

S/137/63/000/002/016/034
A006/A101

AUTHORS: Yakushin, M. V., Bryukhanov, I. G., Nikitina, L. I., Khvesyuk, F.I.

TITLE: The use of oxygen at the Irtysh copper-melting plant

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 35, abstract 2G185 ("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met.", 1962, no. 7, 62 - 77)

TEXT: At the Irtysh copper-melting plant O_2-enriched blast is used in shaft melting and converting. With a higher O_2 content in the blast the output of the shaft furnaces per 1 nm^3 of blast increases and is at a constant 23.75% O_2 in the blast as high as 117.5%, at 25.2% O_2 - 129.6% and at 27.3% O_2 - 156.8%. In converting, the increased O_2 content in the blast up to 23.3% raises the efficiency of the converters per 1 hour blast by 20% and per 1 hour operation by 14 - 15%.. At a 25.3% O_2 in the blast, the efficiency of the converter per 1 hour blast increases by 37 - 40% and per 1 hour operation by 23 - 25%. The temperature of exhaust gases in the shaft furnace decreases from 590 to 320°C (at 27.3%

Card 1/2

The use of oxygen at the Irtysh copper-melting plant S/137/63/000/002/016/034
A006/A101

O_2). The output of cyclon dust in the use of blast enriched with O_2, decreases by 15 - 20%. The scum formation in the tuyere zone and the furnace top is reduced. There are 10 references.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

BRYUKHANOV, N.

BRYUKHANOV, N.; TIKHONOV, M.

Work out cost and output standards for grain dryers. Muk.-elev.
prom.21 no.9:30 S'55. (MIRA 8:12)

1. Krasnoyarskaya kontora Zagotzerno
(Grain--Drying)

ARTAMONOV, K.I.; LEBEDEV, N.I.; YERGALIYEV, E.Ye.; LESECHKO, A.K.; YAKUSHIN, M.V.; KAZAKOV, V.N.; BRYUKHANOV, N.G.; NIKITINA, L.I.; KHVESYUK, F.I.; Prinimali uchastiye: MATVEYEV, A.T.; KOVALEV, S.I.; ROMANOV, V.S.; MARCHENKO, B.P.; ZUDOVA, T.I.; OMAROV, M.N.; PECHENKIN, S.N.; LUKIN, Ye.G; KHLUDKOV, V.I.

Shaft-furnace copper smelting with an oxygen-enriched blow. TSvet. met. 34 no.3:32-39 Mr '61. (MIRA 14:3)

1. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev, Yergaliyev, Lesechko, Matveyev, Kovalev, Romanov, Marchenko, Zudova, Omarov). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut tsvetnykh metallov (for Yakushin, Kazakov, Bryukhanov, Nikitina, Khvesyuk, Pechenkin, Lukin, Khludkov).

(Copper—Metallurgy) (Oxygen—Industrial applications)

TSYGODA, I.M.; KAZAKOV, V.N.; KOLESNIKOV, N.A.; BRYUKHANOV, N.G.; BURBA, A.A.; SADYKOV, V.I.; PIGAREV, A.D.; Prinimali uchastiye: PECHENKIN, S.N.; GLAZACHEV, G.M.; KHVESYUK, F.I.; KODINTSEV, A.V.; YERGALIYEV, E.Ye.; YERMAKOVA, Z.S.; NOVAK, I.V.; KHIL'KO, I.Ye.; LYASHEVSKIY, R.A.; PROKHOROV, A.I.; CHERTOVA, N.G.; URUBKO, V.N.; KUGUCHEV, V.V.

Industrial testing of a flow sheet for the processing of Altai complex metal ores along the lines of the flow sheet used at the Mednegorskii Combine. TSvet. met. 36 no.12:12-15 D '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy gorno-metallurgicheskiy institut tsvetnykh metallov (for Pechenkin, Glazachev, Khvesyuk, Kodintsev). 2. Irtyshskiy polimetallicheskiy kombinat (for Yergaliyev, Yermakova). 3. Mednogorskiy medno-sernyy kombinat (for Novak, Khil'ko, Lyashevskiy, Prokhorov, Chertova, Urubko, Kuguchev).

YAKUSHIN, M.V.; BRYUKHANOV, N.G.; KAZAKOV, V.N.; NIKITINA, L.I.; KHVESYUK, F.I.; PECHENKIN, S.N.; ARTAMONOV, K.I.; LEBEDEV, N.I.; MATVEYEV, A.T.; KOVALEV, S.I.

Converter treatment of complex metal mattes with an oxygen enriched blow. TSvet.met. 34 no.10:34-39 0 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Yakushin, Bryukhanov, Kazakov, Nikitina, Khvesyuk, Pechenkin). 2. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev, Matveyev, Kovalev).

(Nonferrous metals--Metallurgy) (Converters)

FEDOROV, S.A.; BONDAREV, N.K., gornyy inzhener, otvetstvennyy redaktor; BRYUKHANOV, N.T., gornyy inzhener, retsenzent; KOVALENKO, N.I., tekhnicheskiy redaktor.

[Deepening mine shafts by the usual methods] Uglubka stvolov shakht obychnymi sposobami. Sverdlovsk, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1951. 403 p. [Microfilm] (MIRA 10:5)

(Shaft sinking)

BRYUKHANOV, O. A.

BRYUKHANOV, O. A. - "Changes in higher nervous activity of dogs under the influence of radioactive phosphorus administered internally". Leningrad, 1955. Central Sci Res Roentgenoradiological Inst, Min Health USSR. (Dissertation for the Degree of Candidate of Medical Science.)

SO: Knizhnaya Letopis', No. 43, 22 October 1955. Moscow

T

COUNTRY : USSR

CATEGORY : Human and Animal Physiology, The Nervous System

ABS. JOUR. : RZhBiol., No. 5 1959, No. 22485

AUTHOR : Bryukhanov, O.; Lomonos, P.

INST. :

TITLE : The State of the Excitatory Processes of the Cerebral Cortex Associated with the Effects of Ionizing Radiation.

ORIG. PUB. : Fiziol. zh. SSSR, 1957, 43, No. 2, 101--106

ABSTRACT : Intravenous injection into dogs of P^{32} in the amount of 0.16 to 0.70 microcuries/kg with a total activity of 5 to 19 microcuries (which corresponds to a 120 to 585 r dose of internal irradiation) produced phasic changes in the magnitude of conditioned salivation reflexes, which were studied by applying a stereotype of weak and strong conditioned stimuli, reinforced by a meat-and-sugar powder or a 0.25% solution of HCl. In the first few days a phase of diminished conditioned responses was detected, followed by a

Card: 1/2

T-104

COUNTRY : USSR
CATEGORY :

T

ABS. JOUR. : RZhBiol., No. 5 1959, No. 22485

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : phase in which they were relatively increased. After the 19th or 20th day, a second phase of depression ensued, which corresponed to the period in which the manifestations of radiation sickness appeared. Testing for the strength of the stimulative process of summation of conditioned reflexes and giving caffeine showed that during the first phase the cortical cells preserved their functional capacity, and only in the period in which radiation sickness developed was this capacity diminished.--E.B.Glikson

Card: 2/2

BRYUKHANOV, O.A.

Effect of drugs intensifying the process of inhibition on the conditioned reflex activity of irradiated animals. Vop. radiobiol. 2:52-60 '57.

(MIRA 12:6)

1. Sotrudnik TSentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR.

(RADIATION SICKNESS) (CONDITIONED RESPONSE) (AMYTAL SODIUM) (CHLORAL)

MANOYLOV, S.Ye.; BRYUKHANOV, O.A.

Cytochrome effect in radiation. Vop. med. Khim. 9 no. 3: 317-319 My-Je '63. (MIRA 17:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR i Leningradskiy khimiko-farmatsevticheskiy institut Ministerstva zdravookhraneniya RSFSR.

BRYUKHANOV, O. A.

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PHASE I BOOK EXPLOITATION SOV/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchennyy 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhrananiya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Card 1/10

#69

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

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Zedgenidze, G. A., [Member, Academy of Medical Sciences USSR], Ye. A. Zherbin, K. V. Ivanov, and P. R. Vaynshteyn. Hormonal Activity of the Adrenal Cortex in Acute Radiation Sickness and the Effect of Desoxycorticosterone Acetate on the Disease 17

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Problems in Radiation Biology (Cont.) SOV/5435

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Bryukhanov, O. A. Concerning the Problem of Depressant Reactions in Radiation Sickness 44

Lazovskaya, A. V. Effect of Strophanthin on the Heart of Irradiated Animals 50

Shitova, Z. I., and Ye. I. Komarov. On the Reflex Mechanism of the Change in Oxygen Absorption by Intestinal Tissue During Local Irradiation With Radioactive Strontium 55

Remizova, I. V. On Some Features of Functional Changes in the Nervous and Blood System During Repeated Small-Dose Irradiation 61

Traskunova, N. V. Effect of Blocking the Sympathetic Subdivision of the Vegetative Nervous System on the Development and Course of Acute Radiation Sickness 68

Card 3/10

LEVIN, A.M.; BRYUKHANOV, O.N.

Core drying by infrared ray heaters. Lit. proizv. no.3:10 Mr '61. (MIRA 14:6)

(Coremaking) (Infrared rays--Industrial applications)